

Claims

1. A medicinal or dental hand instrument (1) comprising
 - a hand piece (2) and a handle (6) arranged on the hand
 - 5 piece (2),
 - an outlet opening (5), arranged on the front side of the handle (6), for the outlet of an abrasive therapeutic agent and a transport fluid
 - and a coupling terminal (4) for coupling the hand
 - 10 instrument (1) to a supply line for at least one transport fluid, in particular water and/or air
 - wherein the coupling terminal (4) is a coupling component (14b) of a coupling (13),wherein the coupling component (14b) is arranged on an
 - 15 insert piece (20) which can be plugged into a plug-in socket or plug-in recess (19) and which in its end zone facing away from the flow comprises one or more coaxially or paraxially disposed, sealed pipe socket couplings (10), which each connect a feed line (9, 11) for the transport
 - 20 fluid to an ongoing feed line (21, 22).
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2. A hand instrument as claimed in Claim 1, wherein pipe sockets (17, 18) project from the insert piece (20), said pipe sockets in each case extending in an ongoing feed line
 - 25 channel (21, 22).
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3. A hand instrument as claimed in Claim 1, wherein the coupling (13) is formed by a plug-in coupling with a plug-in pin (14a) and a plug-in recess (14b) which accommodates
 - 30 said pin, the plug-in recess (14b) being arranged in the insert piece (20) or in the coupling component which forms part of the supply line.
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4. A hand instrument as claimed in Claim 1, wherein the
 - 35 feed line or feed lines (9, 11) pass through the separating gap between the coupling pin (14a) and the component

comprising the coupling recess (14b) in a Z-formation at penetration points, and the penetration points are sealed on both sides by a respective sealing ring (16)..

5 5. A hand instrument as claimed in Claim 1, wherein the coupling terminal (4) is arranged laterally on the hand piece (2).

6. A hand instrument as claimed in Claim 5, wherein the
10 central axis of the coupling terminal and the longitudinal central axis (10) of the hand piece (2) form a right angle or a forwardly directed acute angle (W).

7. A hand instrument as claimed in Claim 1, wherein a
15 plurality of insert pieces (20) are provided which match differently constructed or shaped coupling components associated with the supply line.

8. A hand instrument as claimed in Claim 1, wherein it
20 comprises a storage container (3) for the abrasive therapeutic agent, in particular powder, which is connected to the feed line (9, 11), the storage container (3) preferably being arranged in the rear region of the hand instrument (1).

25 9. A hand instrument as claimed in Claim 8, wherein the coupling terminal (4) as a whole, or at least the base region of the coupling terminal (4), is forwardly offset relative to the storage container (3).

30 10. A hand instrument as claimed in Claim 1, wherein the coupling terminal (4) has two feed lines (9, 11), preferably one for the therapeutic liquid, in particular water, and the other for a gas, in particular air.

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11. A hand instrument as claimed in Claim 10, wherein the feed line (9b) for gas is arranged at the rear of the feed line (11a) for therapeutic liquid.

5 12. A hand instrument as claimed in Claim 8, wherein the storage container (3) is arranged at the rear end of the hand piece (2), and in particular coaxially with the handle (6), and preferably forms the rear end.

10 13. A hand instrument as claimed in Claim 8, wherein the storage container (3) has a detachable cover (61), the separating gap of the cover (61) extending preferably transversely, and in particular at right angles, to the longitudinal central axis (10) of the hand instrument (1).

15 14. A hand instrument as claimed in Claim 8, wherein a feed line (9) for the transport fluid extends into the storage container (3) with a preferably axial inlet pipe (65), and in particular terminates in the central region of
20 said container.

15. A hand instrument as claimed in Claim 8, wherein a feed line (9) for the transport fluid issues from the storage container (3) with an outlet pipe (34) which
25 projects into the storage container (3), and preferably projects into the central region of said container.

16. A hand instrument as claimed in Claim 14, wherein the inlet pipe (65) preferably extends rearwards from the rear
30 end of the hand piece (2) into the storage container (3) and the outlet pipe (34) is arranged coaxially, and in particular is arranged in the inlet pipe (65).

17. A medicinal or dental hand instrument (1) comprising
35 - a hand piece (2) and a handle (6) arranged on the hand piece (2)

- an outlet opening (5), arranged on the front side of the handle (6), for the outlet of an abrasive therapeutic agent and a transport fluid
- and a coupling terminal (4) for coupling the hand instrument (1) to a supply line for at least one transport fluid, in particular water and/or air
- or a hand instrument as claimed in one of the preceding claims,

wherein in its front zone the hand piece (2) has a handle (6) from which the shaft (7) extends rearwards, and that the handle (6) and the shaft (7) are mounted one beside another so as to be freely rotatable about their longitudinal central axis (10).

18. A hand instrument as claimed in Claim 17, wherein the handle (6) has a rear sleeve attachment (81) and the shaft (7) has a front sleeve attachment (82), the sleeve attachments (81, 82) engaging coaxially over one another with a small movement play, and the sleeve attachment (82) of the shaft (7) preferably engaging over the sleeve attachment (81) of the handle (6).

19. A hand instrument as claimed in Claim 17, wherein the handle (6) and the shaft (7) are held together by a fast-acting connection, preferably a locking connection (83).

20. A medicinal or dental hand instrument (1) comprising

- a hand piece (2) and a handle (6) arranged on the hand piece (2)
- an outlet opening (5), arranged on the front side of the handle (6), for the outlet of an abrasive therapeutic agent and a transport fluid
- and a coupling terminal (4) for coupling the hand instrument (1) to a supply line for at least one transport fluid, in particular water and/or air

- or a hand instrument as claimed in one of the preceding claims,

wherein the hand instrument (1), together with a plurality of abrasive therapeutic agents having different removing capacities and arranged in storage containers, form a therapeutic device.

21. A medicinal or dental hand instrument (1) comprising

- a hand piece (2) and a handle (6) arranged on the hand piece (2)

- an outlet opening (5), arranged on the front side of the handle (6), for the outlet of an abrasive therapeutic agent and a transport fluid

- and a coupling terminal (4) for coupling the hand instrument (1) to a supply line for at least one transport fluid, in particular water and/or air,

- or a hand instrument as claimed in one of the preceding claims,

wherein the outlet opening (5) is arranged in a hollow

needle (27) or a hollow needle head (53), which hollow needle or hollow needle head is detachably connected to the hand piece (2) by a fast-acting connection, in particular a bayonet connection, or a screw connection, preferably a plurality of hollow needles (27) or hollow needle heads

(53) with different shapes and/or sizes and/or outlet opening sizes (5) being provided so as to be exchangeable.

22. A hand instrument as claimed in Claim 20, wherein the types of therapeutic agents differ by virtue of a different granule size and preferably three different therapeutic agents are provided for coarse, medium and fine treatment.

23. A hand instrument as claimed in one of Claims 20, wherein a specified granulation of the therapeutic agent is assigned a specific size of the outlet opening (5) and the hollow needles (27) or hollow needle heads (53) are

provided with a mark which identifies the association with the related therapeutic agent, the different types of therapeutic agents preferably having different colours and the hollow needles (27) or hollow needle heads (53) being
 5 provided with a mark of the associated, same colour.

24. A medicinal or dental hand instrument (1) comprising
 - a hand piece (2) and a handle (6) arranged on the hand piece (2)
 10 - an outlet opening (5), arranged on the front side of the handle (6), for the outlet of an abrasive therapeutic agent
 - and a coupling terminal (4) for coupling the hand instrument (1) to a supply line for at least one
 15 transport fluid, in particular water and/or air
 - or a hand instrument (1) as claimed in one of the preceding claims,
 wherein the interior (8) of the hand piece (2) is connected by a line connection (101) to the feed line (9) for the
 20 gas.

25. A medicinal or dental hand instrument (1) comprising
 - a hand piece (2) and a handle (6) arranged on the hand piece (2)
 25 - an outlet opening (5), arranged on the front side of the handle (6), for the outlet of an abrasive therapeutic agent
 - and a coupling terminal (4) for coupling the hand instrument (1) to a supply line for at least one
 30 transport fluid, in particular water and/or air
 - or a hand instrument (1) as claimed in one of the preceding claims
 wherein a non-return valve (91) is arranged in the feed line (9a) in a position preceding the coupling terminal
 35 (4).

26. A hand instrument as claimed in Claim 25, wherein the non-return valve (91) is arranged in an insert piece (2) having a coupling component (14b).

- 5 27. A medicinal or dental hand instrument (1) comprising
- a hand piece (2) and a handle (6) arranged on the hand piece (2)
 - an outlet opening (5), arranged on the front side of the handle (6), for the outlet of an abrasive
 - 10 therapeutic agent
 - a coupling terminal (4) for coupling the hand instrument (1) to a supply line for at least one transport fluid, in particular water and/or air
 - and a storage container (3)
 - 15 - into which a feed line (66) with at least one inlet opening (73) leads
 - and which is connected to the outlet opening (5) provided on the handle (6) by at least one inner outlet opening (74) and a connection line (9)
 - 20 - or a hand instrument as claimed in one of the preceding claims,
- wherein the inlet opening (73) and the inner outlet opening (74) are arranged in the central region of the accommodating chamber (64) of the storage container (3).

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28. A hand instrument as claimed in Claim 27, wherein the feed line (66) or the connection line (9) is formed by an annular channel and the respective other line extends coaxially within the annular channel.

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29. A hand instrument as claimed in Claim 27, wherein the axial distance between the inlet opening (73) and the outlet opening (74) is small, and in particular is no greater than approximately 30 mm, preferably no greater

35 than approximately 10 mm to 15 mm.

30. A hand instrument as claimed in Claim 27, wherein the inner outlet opening (74) is arranged behind the inlet opening (73).

- 5 31. A hand instrument as claimed in Claim 27, wherein the feed line (66) and the connection line (9) are formed by a double sleeve extending into the accommodating chamber (64) of the storage container (3).